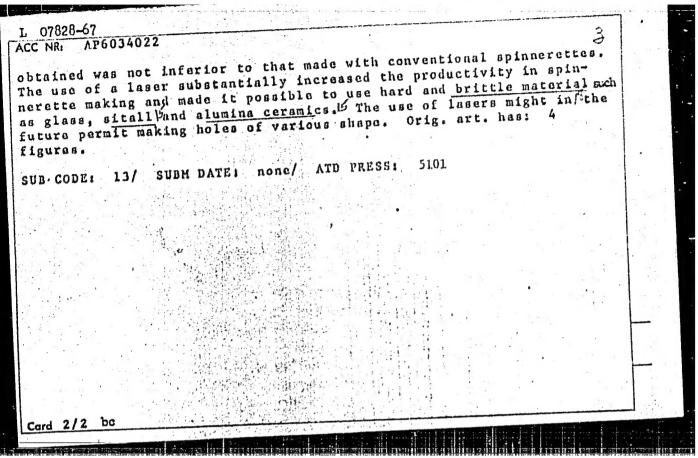


7.1.1.0.1.D.1.0.1.1.0.1.0.1.0.1.0.1.0.1.0
AUTHOR: Zhukov, A. A. (Candidate of technical sciences); Lisovakiy,  ORG: none  ORG: none
TITLE: Making holes in spinnerettes for synthetic filament using an optical quantum generator (laser)  SOURCE: Vesenik mashinestroyeniya, no. 10, 1966, 54-56  TOPIC TAGS: steel spinnerette, filament drawing spinnerette, spinnerette hole drilling, laser hole drilling, laser / OKh23N28N3D3T steel  ABSTRACT: The Scientific Research Institute of Light Textile Machinery radiation energy was spinnerettes. A ruby Na.
spinnerettes. A rubyklaser in making holes in spinnerettes. It was found possible to make holes of almost! cylindrical heat-affected zone did not undergo any substantial changes of the kalinin Synthetic Fiber Plant, which found that the quality of filament  Card 1/2  UDC: 621.95.048



1. 38811-66 FAT (1)  ACC NR. AR6021031	BOURCE CODE: UR/0058/66/000/002/0012/0012
	space charge in an electric field of high frequency in
air	
SOURCE: Ref zh. Fiz, Abs. 20 REF SOURCE: Tr. Nauchn. ob	redin. fizmican
TOPIC TAGS: space charge,  ABSTRACT: An experimental in a plane-parallel dischar	lectric discharge ionization, air, uv radiation tudy was made of the accumulation of positive space charge tudy was made of the accumulation of positive space charge tudy was made of the accumulation of positive space charge tudy was made of the accumulation of positive space charge the gap, excited with an electric high-frequency field. The from the discharge gap by an air jet to the analyzing from the discharge gap by an air jet to the dis-
charge gap. The experiment range of frequencies was l. mm. The initial ionization with ultraviolet light, or	were made in dried air at atmosphere of the electrodes 0.6 - 1.8 i - 10 Mcs, the distance between the electrodes of the electrodes was produced either by illuminating one of the electrodes by introducing into the gap, by means of an air jet, by introducing into the gap, by means of an air jet, by introducing into the gap, by means of an air jet, by introducing into the gap. It is shown that the
negative lone generated	an auxiliary corona discharge. It is shown as a succession of the voltage amplitude almost exponentially in the amplitude of the oscillations of the positive ion bethe amplitude of the oscillations of the positive contance between electrodes; this agrees with qualitative contance between electrodes;
Card 1/2	

L 38814-66  ACC NR. AR6021031  siderations based on of adhesion of the el	the Townsend avalance	he theory with all	owance for the covanivakiy. [Trans	efficient slation
of adhesion of the el of abstract]	lections to the arr -			
SUB CODE: 50		1		
Card 2/2				

L 38815-66 EWT(1)

ACC NR: AR6021032

UR/0058/66/000/002/G012/G012 SOURCE CODE:

Zhukov, A. A. AUTHOR:

TITLE: Formation of negative space charge in a high-frequency electric field in air

SOURCE: Ref zh. Fiz, Abs. 2691

REF SOURCE: Tr. Nauchn. ob"yedin. fiz.-matem. ped. in-tov Dal'n. Vost., v. 4, 1964,

94-98

TOPIC TAGS: space charge, rf field, electric field, electron trapping

ABSTRACT: The use of the apparatus and measurement procedure described in Abstract 2G90 [of the same source, Acc. nr. AR6021031] has made it possible to study the accumulation of negative space charge in a plane-parallel gap excited by a high-frequency electric field. It is shown that the density of the negative space charge varies with variation of the amplitude of the high-frequency voltage nonmonotonically, passing through two minima connected with variations of the coefficients of adhesion of the electrons to the neutral molecules. K. Golovanivskiy. [Translation of abstract]

SUB CODE: 20

ZHUKOV, A.A. (Moskva)

Thermodynamic and kinetic factors in graphitizing white cast iron. Izv. AN SSSR. Met. no.6:69-75 N-D '05.

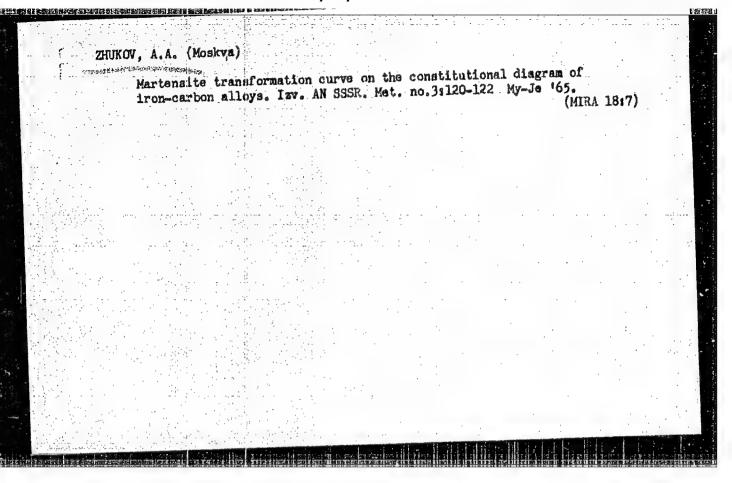
(MIRA 19:1)

1. Submitted August 19, 1965.

ZHUKOV, Aleksey Antipovich; SHAPIRO, I.G., nauchn. red.;
STAROSVETOVA, V.G., red.

[Industrial training of plasterers] Proizvodstvennoe
obuchenie shtukaturov. Moskva, Vyssbaia shkola, 1965.
(MIRA 18:12)

99 p. .



ZHUKOV, A.A. (Moscow)

Thermodynamic principles of the kinetics of phase transitions, Zhur, fiz,khim. 38 no.8:1931-1937 Ag \*64.

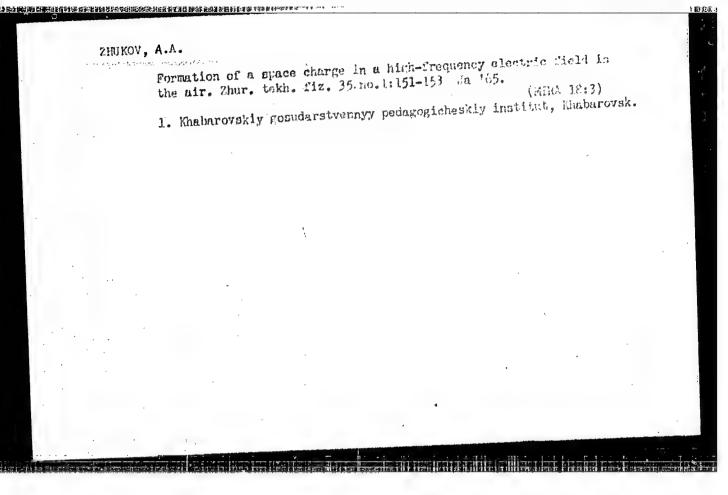
(MIRA 18:1)

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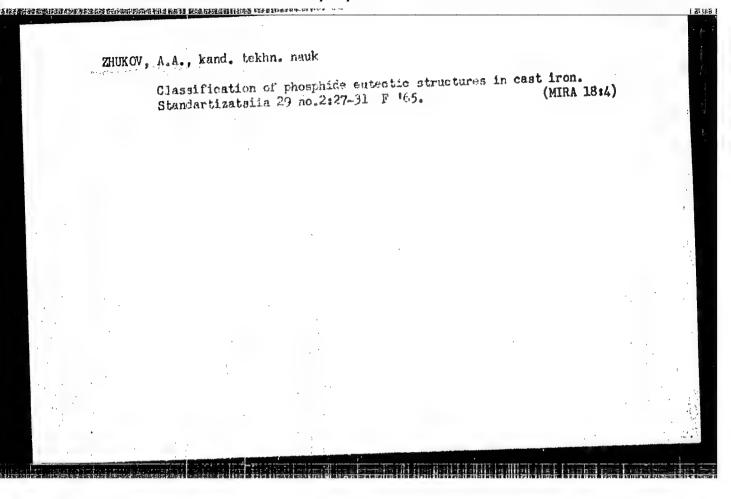
SHALASHOV, V.A.; Prinimali uchastiye: BREGER, A.Kh.; ZHUKOV, A.A.; GOL'DIN, V.A.; TOMAS, V.K.

Effect of irradiation on the structure and tendency to thermal decomposition of chromium cementite. Zhur.fiz.khim. 38 no.11: 2735-2737 N \*64.

(MIRA 18:2)



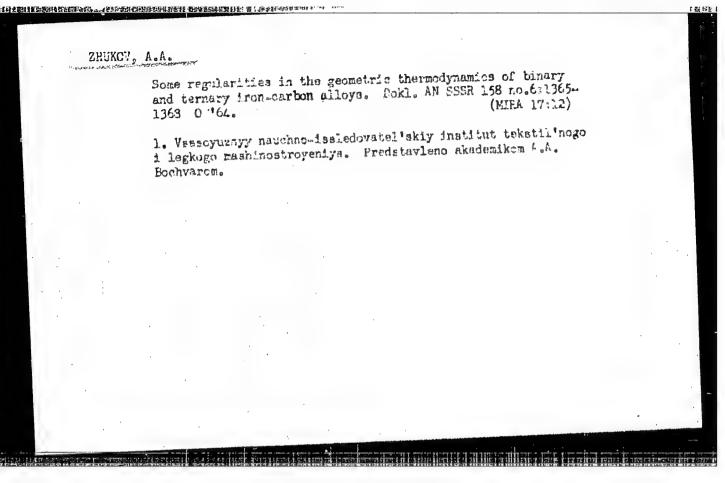
CIA-RDP86-00513R002064920006-2



MANSUROV, A.M.; ZHUKOY. A.A., inzh., retsenzent; BABENKO, V.A., inzh., red.

[Meckanization and automation in forging] Mekhanizatsiia i avtomatizatsiia v kuznechnom proizvodstve. Moskva, Mashinostroenie, 1965. 211 p. (NIRA 18:4)

CIA-RDP86-00513R002064920006-2



ANAN'IN, A.A.; CHERMOBROVKIN, V.P.; ZHUKOV, A.A., kand . tekhn.
nauk, retsenzent; IVANOVA, K.N., inzh., red.

[Short handbook for the cupola furnaceman] Kratkii apravochnik vagranshchika. Moskva, Mashinostroenie, 1964. 118 p.

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Effect of a third component on the eutectic and eutectoid conversion temperature. Zhur. fiz. khim. 39 no.6:1500- (MIRA 18:11)

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CIA-RDP86-00513R002064920006-2

ZHUKOV, A.A., kand. tekhn. nauk

Miorosegregation of silicon in cast iron. Lit. proizv.

(MIRA 18:12)

no.11:23 N '65.

SHIMANTUK, Andrey Petrovich; ZHUKOV, A.B., prof., otv.red.; LIKHACHEV,
A.N., red.izd-ve; ESTAP'TEVA, G.A., tekhn.red.

[Pine forests of Siberia and the Far Hast; silvicultural
characteristics] Sosnovye less Sibiri 1 Dal'nego Vostoka;
losovodstvennaia kharakteristika. Moskva, Izd-vo Akad, nauk
(MIRA 15:2)
SSSR, 186 p.
(Siberia--Pine) (Soviet Far Hast--Pine)

CIA-RDP86-00513R002064920006-2

ZHUKOV, A. B.

Zhukov, A. B. - "G. N. Vysotskiy (Forester, 1865-1940)," Les Khoz-vo, 1948, No. 3, p. 60-64, with picture

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

CIA-RDP86-00513R002064920006-2

- 1. ZHUKOV, A. B. Prof.
- 2. USSR (600)
- 4. Forest Ecology
- 7. On Professor N. P. Anuchin's criticism of biogeocoenosis. Les. khoz. 5, no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

ZHUKCV, A. B.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions amounces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 (and 1953. (Sovetskays Kultura, Moscow, No. 22-ko, 20 Feb - 3 Apr 1954)

Kame

Tyurin, A. V.

Zhukov, A. B.

Ivanenko, B. I.

Lositskiy, K. B.

Kharitonovich, F. N.

Napalkov, N. V.

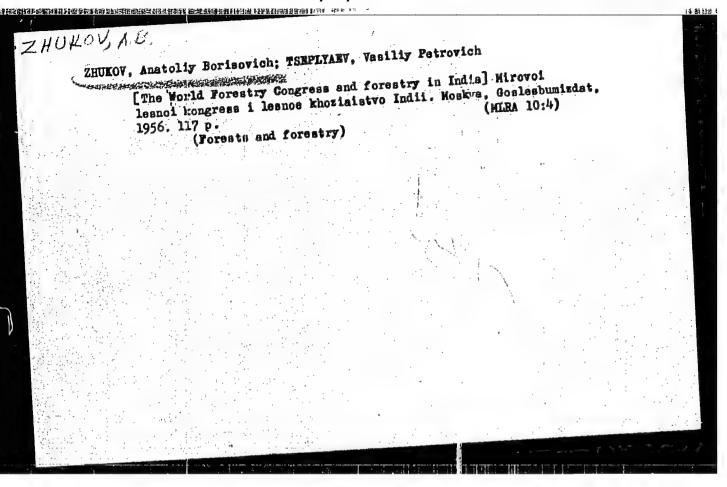
Title of Work

"Investigation of Cak Forests of the USSR and Measures for Cultivating them" Hominated by

All-Union Scientific Research Institute of Forestry

SO: W-30604, 7 July 1954

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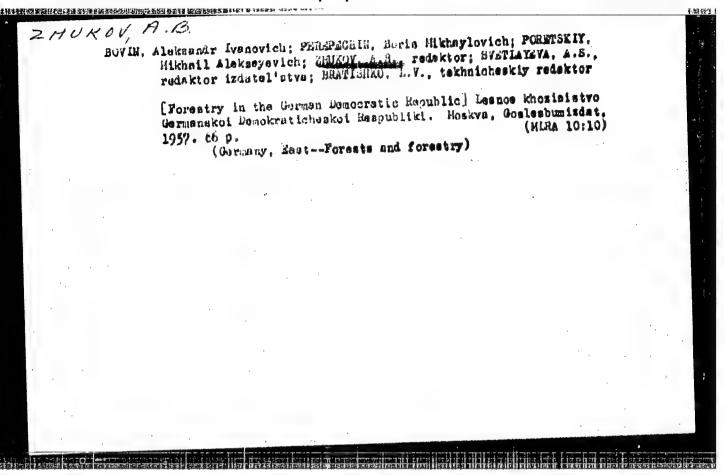
 THORSEY, Vladimir Petrovich; TISHCHENKOY, Ivan Antegovich; TSEPLYATEY,
Vasily Petrovich; SHIBEY, Ivan Semenovich; ZEUKOY, A.Z., red.;
Vasily Petrovich; SHIBEY, Ivan Semenovich; ZEUKOY, A.Z., red.;
SHAKHOVA, L.I., red.isd-va; BRATISHKO, L.V., iekhn.red.

[Forestry in Great Britain] Lesnoe khoziaistvo Velikobritanii.

[Forestry in Great Britain—Forests and forestry)

(Great Britain—Forests and forestry)

CIA-RDP86-00513R002064920006-2



COUMTRY

CATEGORY : Forestry. Forest Management.

1 ::::

ABS, JOUR. | RZhBiol., No. 14 1959, No.

AUTHOR

: Zhukov, 1. 7.

leadery of release, UST, Forest Institute

INST. TIPLE

: Problems in Improving the Productivity of Forests

(Conference Hold at the Forcet Institute)

ORIG. PUB.

: Vestn. AN SSSR, 1957, No. 4, 123-125

ABSTRACT

: A meeting which washeld at the Forest Institute in Pecember 1956 is reported on. The content of reports by representatives of the science of forestry and its practice is described, in which questions about the contemporary state of the problem of improving forest productivity and of practical measures in this direction are touched upon, . the future wood requirement in the USSE, and the significance of its dimensions in determining cutting age, etc. Means of raising productivity of forests and improving their quality are also noted .-- V. I. Klimov

Card:

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K

Country: USSR

Category: Forestry. General Problems.

Abs Jour: RZhBiol., No 12, 1958, No 53439

and practical problems representing the basis of the work are analyzed and the authors of the studies are indicated. Attention is paid to the problem of raising the productivity of the forests; the problem of natural restoration, the cutting down of forests as part of maintenance, etc. It is pointed out that by cuttings that are part of maintenance, it is possible to reduce by 20-30, the growing period of the technically mature woods. Using the same method it is possible to improve the qualitative composition of mixed plantings, but it is impossible to raise the general productivity of the forest stands.

2/2

K-1

ZONN, Sergey Vladimirovich; ZHUKOV, A.B., prof., doktor sel'skokhoz.

nauk, otv.rnd.; MARKOV, V.Ya., red.izd-va; HOVICHKOVA, N.D.,
tekhn.rdd.

[Soil moisture and forest plantations] Pochvenraia vlaga i
lesaye nasashdeniia. Moskva, Izd-vo Akad.nauk SSSR, 1959.

(Forests and forestry) (Soil moisture)

(Forests and forestry) (Soil moisture)

P'YAVCHENKO, N.I., prof., doktor biolog.nauk, otv.red.; SUKACHEV, V.N., akademik, red.; VASIL! YEV, P.V., prof., red.; ZHUKOV. A.B., prof., red.; HOTOVILOV, G.P., prof., red.; PRAVDIN, L.F., prof., red.; HUKS, Ye.A., red.izd-va; HRATISHKO, L.V., tekhn.red.

[Problems in increasing forest production; in 4 volumes] Problemy povysheniia produktivnosti lesov v chetyrakh tomakh. Moskva. Goslesbumizdat. Vol.2. [Forest drainage measures] Lescosushitel'nye meropriiatiia. 1959. 148 p. (MIHA 14:3)

1. Akademiya nauk SSSR. Institut less. 2. Institut less Akademii nauk SSSR (for P'yavchenko).

(Forest management) (Drainage)

子林表现1350年进行的对码:在市场公司经济的企业的过程的现在分词 经通过 医动脉管闭节检查检查 血 presidence a contract a c

PRAVDIN, L.F., prof., doktor biolog.nauk, otv.red.; SUKACHEV, V.N., skademik, red.; VASIL'YEV, P.V., prof., red.; ZHUKOV, A.B., prof., red.; MONOVILOV, G.P., prof., red.; P'YAVCHENKO, N.I., prof., red.; FUKS, Ye.A., red.ind-va; PARAXHINA, H.L., tekhn.red.

[Problems of increasing the productivity of forcats] Problemy povysheniic produktivnosti lesov; v chetyrekh tomakh. Moskva. Gosleshumisdat. Vol.3. [Introducing in forests fast-growing and economically-valuable tree species] Vvedenie v less bystro-rastushchikh i khosisistvenno tsennykh dravesnykh porod. 1960. (MIRA 13:11)

1. Akademiya nauk SSSR. Institut less. 2. Institut less Akademii nauk SSSR (for Prevdin).

(Forests and forestry)

支援支援的引擎系统计划使用决定的连续转换的代更消耗还是在连续指引进 医院是数据有限 美 经收益 "这时间,这时间,这时间

ZHUKOV, A.B., prof., doktor sel'skokhoz.nauk, otv.red.; REMEZOVA, G.L., red.izd-va; POLYAKOVA, T.V., tekhn.red.

[Recent forestry research] Novye lesovodstvennye issledovaniia. Moskva, Izd-vo Akad.neuk SSSR, 1960. 129 p. (MIRA 13:7)

1. Akademiya nauk SSSR. Laboratoriya lesovedeniya. (Forests and forestry)

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CIA-RDP86-00513R002064920006-2

ZHUKOV, Anatoliy Borisovich

"Regional Specialization of Forest Plantations"

report to be submitted for the Fifth World Forestry Congress, Seattle, Washington, 29-10 Sep 60

Directro, Institute of Forestry & Wood Processing, Siberian Department, Acad. of Sciences USSR, Krasnoyarsk.

全工工程写真法并可完成的主义可数的主要 Blandale wein a policale and a

POZDNYAKOV, Lev Konstantinovich; ZHUKOV, A.B., prof., doktor sel'khos.
nauk, otv. rad.; LIKHACHEV, A.N., red.izd-va; YEGOROV, N.F., tekhn.rad.
[Larch and pine forests of the upper Aldan] Listvannichnye i

sosnovye lesa Verkhnego Aldana. Moskva, Izd-vo Akad. nauk SSSR, 1961. 173 p. (Aldan Valley-Earch) (Aldan Valley-Pine)

VASIL'YEV, P.V., prof., doktor ekon. nauk; PONOMAREV, A.D.; SOLDATOV, A.G., kand. sel'khoz. nauk; MOTOVILOV, G.P., doktor sel'khoz. nauk; NEVZORCV, N.V., kand. ekon. nauk; LOSITSKIY, K.B., kand. sel'khoz. nauk; RODIONOV, A.Ya., kand. sel'khoz. nauk: CHARKINA, A.P., kand. sel'khoz. nauk; LUTSEVICH, A.A., kand. sel'khoz. nauk; KOZHEVNIKOV, M.G., dots.; ALEKSEYEV, P.V., kand. sel'khoz. nauk; ZORIN, A.V., aspirant; BARANOV, N.I., kand. sel'khoz.nauk [deceased]; NAUMENKO, I.M., prof., doktor sel'khoz.nauk; IL'IN, A.I., kand.sel'khoz. nauk; MOISEYENKO, F.P., kand. biol. nauk; ZAKHAROV, V.K., prof., doktor sel'khoz. nauk; GECHIS, Yu.P., starshiy mauchnyy sotr.; EUTENAS, Yu.P., kand. sel'khoz. nauk; MUBLIS, K.A., aspirant; KAININ'SH, A.Ya., kand. sel'khoz. nauk; ZVIYEDRIS, A.I., kand. sel'khoz. nauk; SUKACHEV, V.N., sel'khoz. nauk; ZVIYEDRIS, A.I., kand. sel'khoz. nauk; SUKACHEV, V.N., akad. red.; ZHUKOV, A.B., prof., red.; PRAVDIN, L.F., prof., red.; MAKAROVA, L.V., red. izd-va; LOBANKOVA, R.Ye., tekhn. red.

[Problems of increasing forest productivity in four volumes] Problemy povysheniia produktivnosti lesov v chetyrekh tomakh. Moskva, Goslesbumizdat. Vol.4. [Economic problems of increasing forest productivity and accelerating ripening and cutting ages ] Ekonomicheskie voprosy povysheniia produktivnosti lesov, vozrasty spelosti i vozrasty rubok, 1961. 253 p. (MIRA 15:1)

1. Akademiya nauk SSSR. Institut lesa. 2. Nachal'nik Glavnoy inspektsii po lesnomu khozyaystvu i polezashchitnomu lesorazvedeniyu Ministerstva sel'skogo khozyaystva SSSR (for Ponomarev).

(Forests and forestry—Economic aspects)

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1. Institut lesa i drevesiny Sibirskogo otdeleniya AN SSSR, Krasnoyarsk.

(FORESTS AND FORESTRY)

KURBATSKIY, Nikolay Petrovich; ZHUKOV, A.B., prof., doktor sel'khoz. nauk, red.; POPOVA, A.G., red. izd-va; SHIBKOVA, R.Ie., tekhn. red.

[Techniques and tactics of fighting forest fires] Tekhnika i taktika tusheniia lesnykh pozharov. Moskva, Goslesbumizdat, 1962. 153 p. (MIRA 15:9)

1. Direktor Instituta lesa i drevesiny Sibirskogo otdeleniya Akademii nauk SSSR (for Zhukov).

(Forest fires—Prevention and control)

P'YAVCHENKO, Nikolay Ivanovich; ZHUKOV, A.B., doktor sel'khoz, nauk, prof., otv. red.; VOLINSKAYA, V.S., red.izd-va; VOLKOVA, V.V., tekhn. red.

[Study of forest swamps] Lesnoe bolotovedenie; osnovnye voprosy. Moskva, Izd-vo Akad, nauk SSSR, 1963. 190 p.

(MIRA 16:5)

(Porest ecology) (Swamps)

 POZDNYAKOV, Lev Konstantinovich; ZHUKOV, A.B., doktor sel'khoz.
nauk, prof., otv. red.; TIKHOMIROV, V.N., red. izd-va;
RYLINA, Yu.V., tekhn. red.

[Hydroclimatic conditions in the larch forests of central Yakutia] Gidroklimaticheskii rezhim listvennichnykh lesov TSentral'noi IAkutii. Moskva, Izd-vo AN SSSR, 1963. 144 p. (MIRA 16:7)

(Yakutia-Larch) (Yakutia-Forest influences)

ZHUKOV, A.B., prof., doktor sel'khoz. nauk, otv. red.; BROVKINA, Ye.T., red.izd-va; TIKHOMIROVA, S.G., tekhn. red.

[Protection of the forests of Siberia from insect pests]
Zashchita lesov Sibiri ot nasekomykh-vreditelei. Moskva,
Izd-vo Akad. nauk SSSR, 1963. 215 p. (MIRA 16:6)

1. Akademiya nauk SSSR. Institut less i drevesiny.
(Siberia—Forest insects—Extermination)
(Siberia—Forest fires)

ZHUKOV, A.B., zasl. deyatel' nauki RSFSR, prof., doktor sel'khoz.
nauk, otv. red.

[Materials on the study of forests of Siberia and the Far East] Materialy po isucheniiu lesov Sibiri i Dal'nego Vostoka; trudy konferentsii. Krasnoiarsk, AN SSSR, 1963. 369 p. (MIRA 16:9)

1. Nauchnaya konferentsiya, posvyashchennaya izucheniyu lesov Sibiri i Dal'nego Vostoka, Krasnoyarak, 1962. 2. Institut lesa i drevesiny Sibirskogo otdeleniya AN SSSR (for Zhukov).

(Siberia-Forests and forestry)
(Soviet Far East-Forests and forestry)

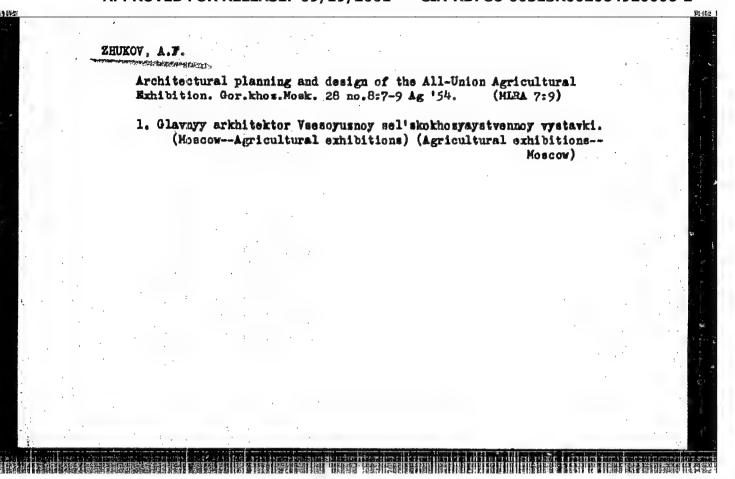
POBEDINSKIY, Avramiy Vladimirovich; ZHUKOV, A.B., otv. red.; RODMAN, L.S., red.

[Pime forests in central Siberia and Transbaikalia] Sosnovye lesa Srednei Sibiri i Zabaikal'ia. Moskva, Nauka, 1965. 266 p. (MIRA 18:9)

BIDEPMAN, V.L.; ZHUKOV, A.D.

Design of rubber plate type shock absorbers. Kauch. 1 rez. 24 no.10:32-36 '65. (MIRA 18:10)

1. Moskovskoye vysaheye tekhnicheskoye uchilishche imeni N.E. Baumana.



ZHUKOV, A.F., professor.

Architecture of the All-Union Agricultural Exhibitions. Nauka i zhizn' 21 no.9:27-29 8 '54. (MLRA 7:9)

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(Moscow--Agricultural exhibitions) (Agricultural exhibitions--Moscow)

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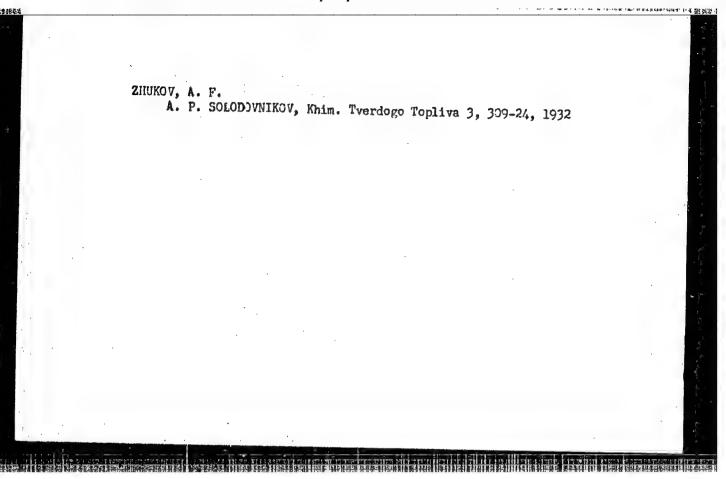
ZHUKOV, Anatoliy Fedorivich

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ZHUKOV, Anatoliy Fedorovich

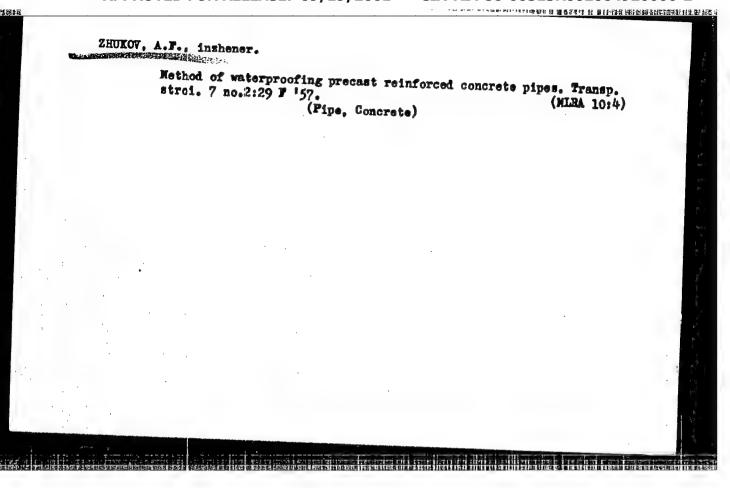
Arkhitektura Vsesoyuznoy Sel'skokhozyaystvennoy Vystavki (Architecture of the All-Union Agricultural Fair) Moskva, Gosstroyizdat, 1955.

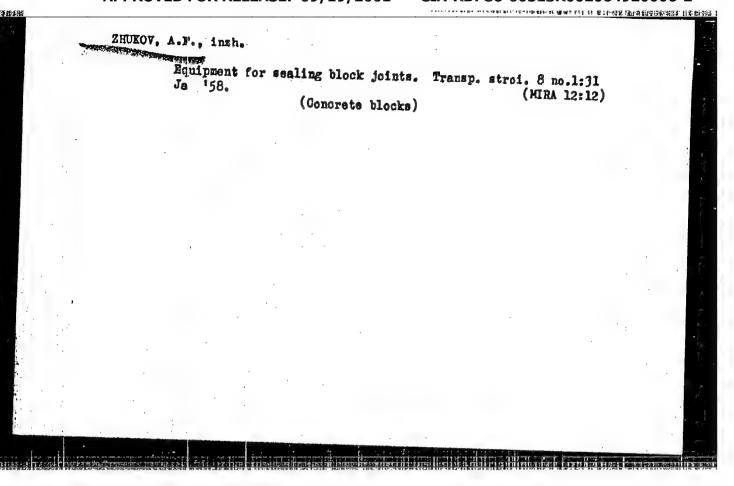
198 p. illus.

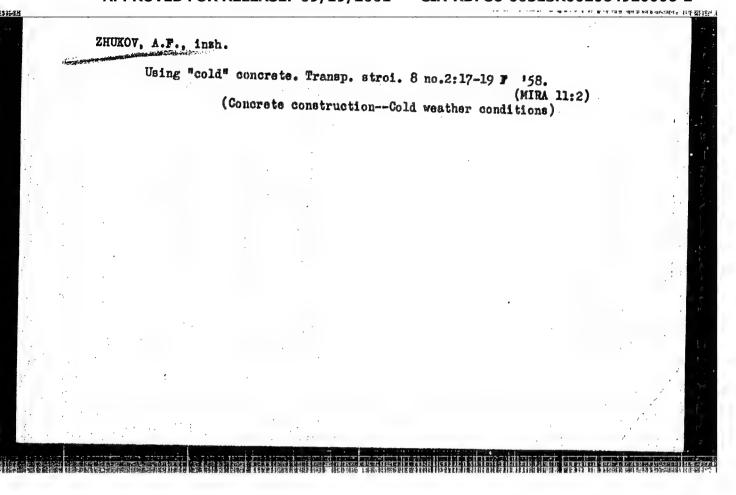


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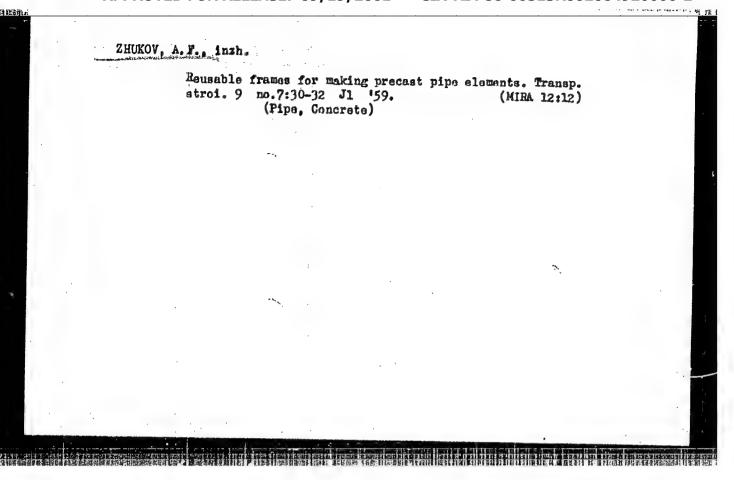


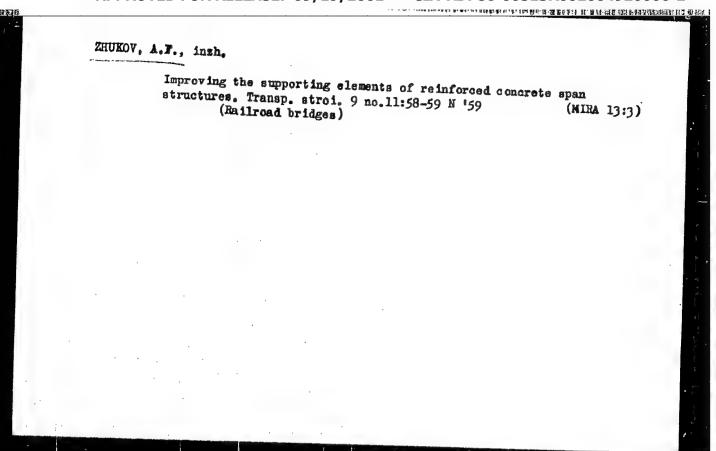


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#### CIA-RDP86-00513R002064920006-2

	Equipment used for slinging culvert sections. Transp.stroi. 9 no.3:58 Hr 159. (MIRA 12:4)	•	
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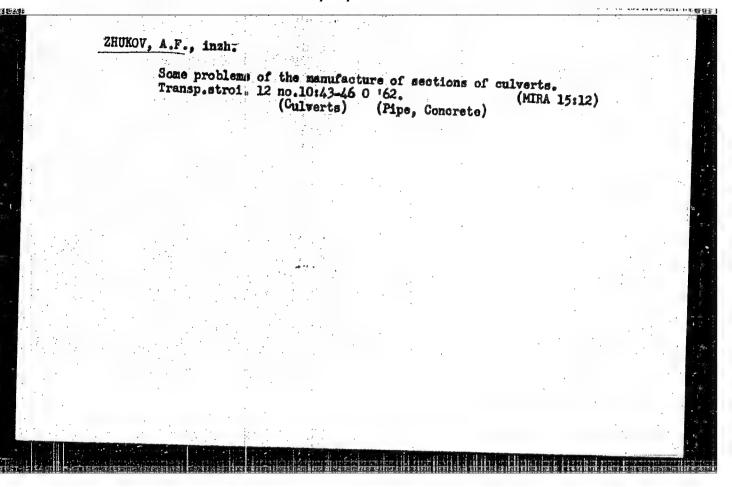
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ZHUKOV, A.F., inzh.

Forms for malcing architectural birdge details. Avt. dor. 24
no. 1:12-13 Ja \*61.

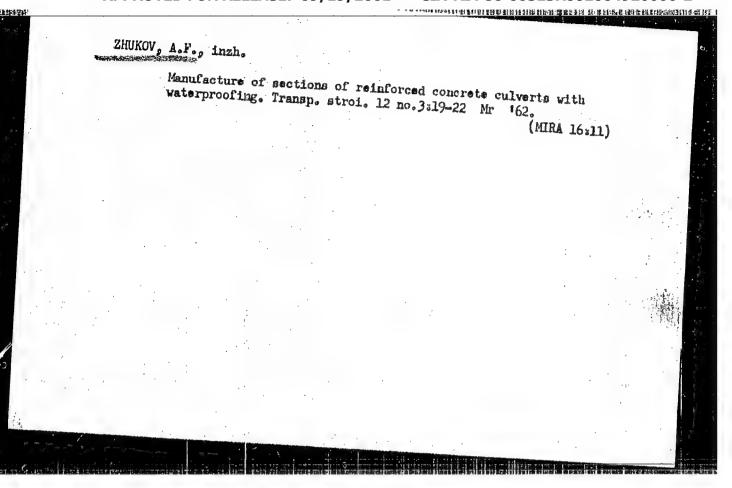
(Moscow—Concrete construction—Formwork)

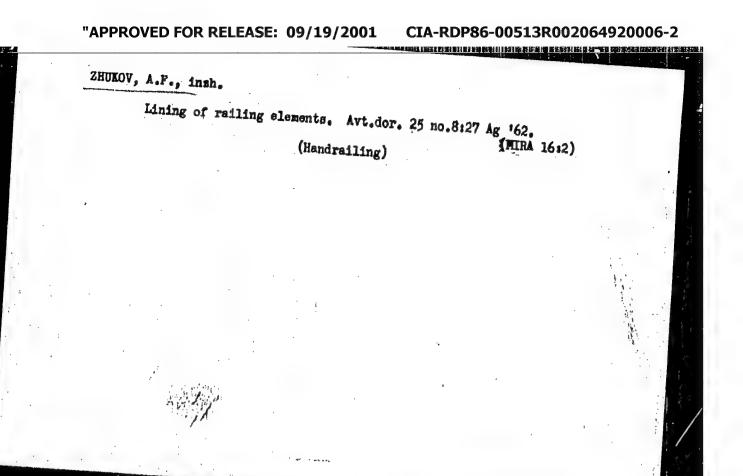
(Bridges, Concrete)



# "APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002064920006-2

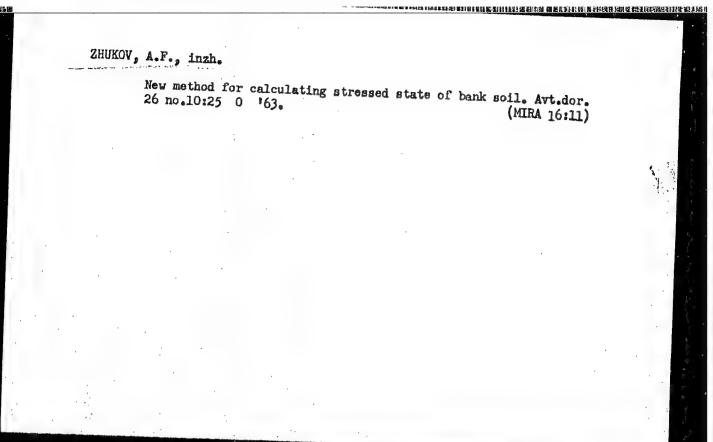


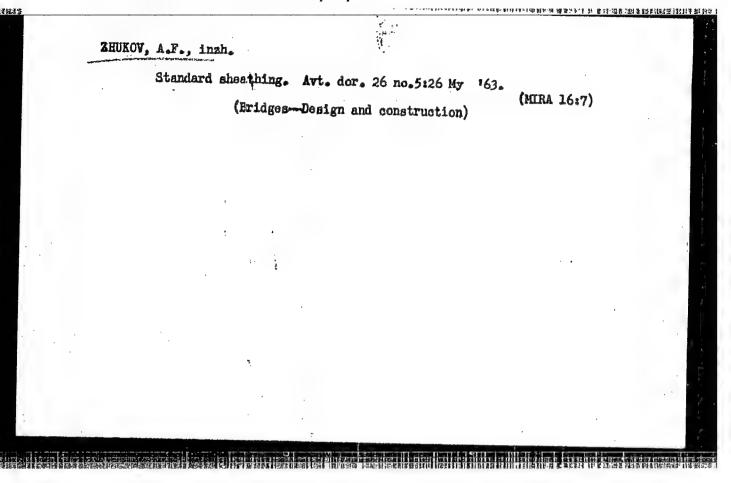


ZHUKOV, A. F., inzh.

Unit for the manufacture of "carpets" of waterproofing. Transp. stroi. 13 no.3:53-54 Mr '63. (MIRA 16:4)

(Waterproofing)





#### "APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002064920006-2 

(MIRA 18:12)

ZHUKOV, A.F., inzh. Calculating the force of pipe tension. Transp. strol. 15 no.6: 46-47 Je '65. (MIRA 18:12)

L 28353-66 EWT(m)/EWP(t)/ETI IJP(c) JW/JD

ACC NR: AP5027671 SOURCE CODE: UR/0051/65/019/005/0783/0787 4

AUTHOR: Berman, L. V; Zhukov, A. C.

4 8

ORG: none

TITLE: Optical properties of CaF2 in the 170-600  $\mu$  vavelength range

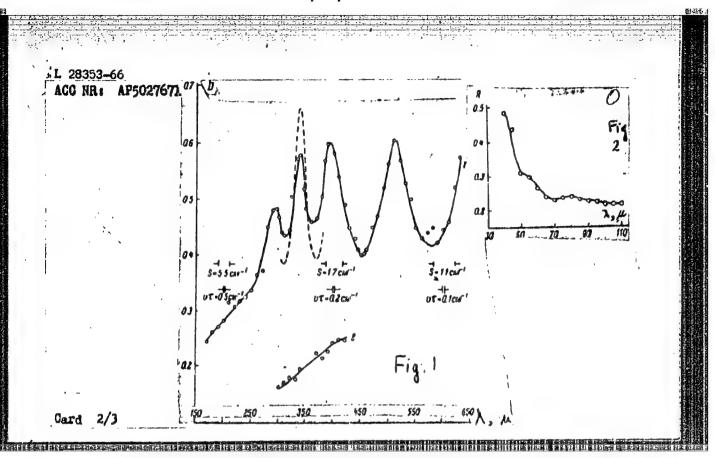
SOURCE: Optika i spektroskopiya, v. 19, 5, 1965, 783-787

TOPIC TAGS: spectrographic analysis, optic property, calcium compound, absorption coefficient, IR spectrometer

ABSTRACT: The CaF<sub>2</sub> transmissivity was measured in the wavelength range of 170-600  $\mu$  at room temperature and in the range of 150-350  $\mu$  at -900 by using a long-wave infrared spectrometer described by A. G. Zhukov (Opt. 1 spektr., 17, 284, 1964). The changes of the coefficient of transmissivity D at various wavelengths ( $\lambda$ ) are represented in the attached diagram (see Fig. 1) for samples 0.4 mm (curve 1) and 1.96 mm thick (curve 2) measured at room temperature. The reflectivity (R) of CaF<sub>2</sub> was measured in the wavelength range of 40-110  $\mu$  at the angle of incidence of 250 (see Fig. 2). The absorption coefficient k was

Card 1/3

UDG: 535.321 535.341-15



L 28353-66 ACC NR: AP5027671

calculated from experimental data. It changed at room temperature from 0.034 (at 170  $\mu$ ) to 0.016 (at 420  $\mu$ ). The transmissivity of CaF, at -90C was measured in a 1.90 mm thick sample at  $\lambda = 150-350$   $\mu$ . At -90C, the value of k was 0.004, i.e., 5 to 10 times smaller than at room temperature. The refractive index n was calculated as 2.58  $\pm$  0.06 from the maximum and minimum on the interference curve of transmissivity and from the formula  $\frac{(n-1)^2 + k^2}{(n-1)^2 + k^2}$  (average error  $\pm 4k$ ). The authors thank V. E. Shvetsova for preparation of the low-temperature experiments and  $\frac{k}{k}$ .  $\frac{M}{k}$ .  $\frac{M}{k}$  thouskays for assistance in measuring. Crig. art. bas: 4 fig., 4 formulae and 1 table.

SUB CODE: 20/ SUBM DATE: 11Aug64/ ORIG REF: 001/ OTH REF: 012

Card 3/3 100

ZHUKOV, A.G.; SMIRNOV, V.I.

Polarizing properties of echelette gratings in the long-wave infrared region. Zhur. prikl. spekt. 3 no. 6:560-563 D 165 (MIRA 19:1)

1. Submitted November 13, 1964.

L 15985-66 EWT(1)/EWT(m)/T/EWP(e) IJP(c) WH

ACC NR: AP6005476 SOURCE CODE: UR/0368/66/004/001/0068/0070

AUTHOR: Bogens, R. K.; Zhukov, A. G.

ORG: none

TITLE: Optical constants of fused quartz in the far infrared region

SOURCE: Zhurnal prikladnoy spektroskopii, v. 4, no. 1, 1966, 68-70

TOPIC TAGS: quartz, refractive index, light absorption, IR absorption, IR spectrum

ABSTRACT: The transmission and reflection spectra for specimens of fused quartz of various thicknesses were measured in the 60-560  $\mu$  wavelength range. The resultant data were used for determining the indices of refraction (n) and absorption (k). The reflectance of a plate 25 mm thick was used for determining the index of refraction in the 50-90  $\mu$  wavelength range. In the 220-400  $\mu$  region the index of refraction was determined from the position of the maxima and minima in the interference transmission spectrum of a plate 0.258 mm thick. The data show a reduction in n from 2.07 in the 50  $\mu$  region to 1.94 at 90  $\mu$ . In the 220-400  $\mu$  region, n remains practically constant, varying from 1.89 to 1.92 with an average value of 1.91. The

Card 1/2

UDC: 535.312

L 15985-66
ACC NR: AP6005476

Index of absorption was calculated from the coefficients of transmission for plates with thicknesses of 1.05, 2.03, 4.07 and 12.35 mm with regard to the values of the refractive index. A curve is given showing the index of absorption as a function of from 0.0165 at 60 µ to 0.0038 at 560 µ. The transmission factor of fused quartz is independent of temperature in the 250-550 µ region. Orig. art. has: 2 figures, 2

SUB CODE: 20/ SUBM DATE: 12Feb65/ ORIG REF: 003/ OTH REF: 007

ZHUKOV, A.G.; RUKMAN, G.I.

Thermal conditions of a heat receiver in recording the radiation from weakly heated bodies. Prib. 1 tekh. eksp.
9 no.2:138-141 Mr-Ap'64. (MIRA 17:5)

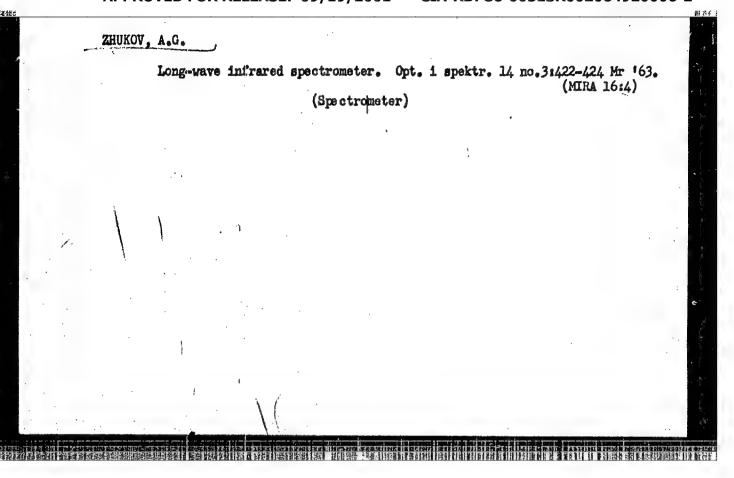
# ZHUKOV, A.G. insh.

2920

Work of the Administration of the Power Fuel Industry of the Moscow Province Economic Council. Torf.prom. 34 no.6:1-3 '57. (MIRA 10:12)

1. Upravleniye toplivno-energeticheskoy promyshlennosti Mosoblsovnarkhoza.

(Moscow Province--Peat industry)



Device for fine grinding of preparations. Prib. i tekh. eksp.
7 no.3:150 At-Je '62. (MIRA 16-7)

(Palverizers) (Shock waves)

ACCESSION NR: AP4033134 S/0120/64/000/002/0138/0141

AUTHOR: Zhukov, A. G.; Rukman, G. I.

TITLE: Functioning of a thermal receiver which records radiation from slightly warm bodies

SOURCE: Pribory\* i tekhnika eksperimenta, no. 2, 1964, 138-141

TOPIC TAGS: thermal receiver, bolometer, temperature measurement

ABSTRACT: An experimental investigation is reported of the effect of the temperature of a thermal receiver (bolometer) upon a signal in its circuit when the temperatures of the test object, the surrounding medium, and the bolometer itself differ only slightly. When the bolometer temperature is higher than that of the object, a rise in the bolometer's temperature results in an increase of its the object, a rise in the bolometer's temperature results in an increase of its signal. A vacuum low-inertia (0.02 sec) bolometer with a sensitivity of 7x10 w

Card 1/2

rs	Manual Andrews		
ACCESSION NR: AP403313	4		
was used for the registre temperatures within 186-tion based on an analysi the bolometer and the obment with the experiment usable signal can be rai which is essential when "The authors wish to the ing out the experiments."	lect was shown to be in al data. It was found	exchange between satisfactory agree- that the bolometer's own temperature,	The state of the s
		order o rormulas.	
ASSOCIATION: none		sura, o rormulas,	
ASSOCIATION: none		o formulas,	
	DATE ACQ: 11May64	ENCL: 00	
ASSOCIATION: none / SUBMITTED: 28Apr63		o formulas,	
ASSOCIATION: none / SUBMITTED: 28Apr63	DATE ACQ: 11May64	ENCL: 00	

FAYDISH, O.M.; ZHUKOV, A.G.

Effect of the size of crystals on the luminescence of anthracensnaphthalene solid solutions. Nauk.sap.Kiev.un. 15 no.5:?1-76 156.

(MLRA 10:?)

(Anthracene) (Maphthalene) (Luminescence)

# A G ZHUKOV and M V BUKHAREVA

"Development of a Procedure for Determining the Specific Surface of Powders by Methanol Absorption" from Annotations of Works Completed in 1955 at the State Union Sci. Res. fust; Min. of Radio Engineering Ind.

Sp: B-3,080;964

 A G ZHUKOV

"Development and Testing of a Prototype Photoelectric Apparatus for Control of the Thickness of Cathode Carbonate Coatings" from Annotations of Works Completed in 1955 at the State Union Sci. Res. Tust: Min. of Radio Engineering Ind.

So: B-3,080,964

BELOKOPYTOV, I.Ye.; BERESNOVICH, V.V.; BERSHADSKIY, L.S.; VEXTS, L.F.;

ZHUKOV, A.G.; IVASHECHKIN, N.V.; KUZHMAN, G.I.; LASHNEV, I.A.;

MURASHOV, F.G.: NIKODIMOV, P.I.; PYATAKOV, L.V.; SAMSONOV, N.N.;

SEMENSKIY, Ye.P.; SINITSYN, N.A.; SOLOPOV, S.G.; STRUKOV, B.I.;

STEBIKHOV, M.I.; TSUPROV, S.A.; CHERNOV, A.A.; CHULYUKOV, M.A.

Ivan Aleksandrovich Monakin. Torf. prom. 37 no. 3:37 '60. (MIRA 14:1) (Monakin, Ivan Aleksandrovich, 1908-1960)

TUL: CHINSKIY, B.S.; ZHUKOV, A.G.

Preparing objects for an electron microscope. Prib. i tekh. eksp. 6 no.4:176-178 J1-Ag '61. (MIRA 14:9) (Electron microscope)

表表主義, 在社會主要的 國際共享的支持的政治的政治政治政治政治政治 医环络抗发性性 医 医神经性 医血栓性 电电子电压 1.1.1.

Card 1/2

S/120/62/000/003/035/048 E039/E135

AUTHORS: Tul'chinskiy, B.S., and Zhukov, A.G.

TITLE: Apparatus for the fine crushing of preparations
PERIODICAL: Pribory i tekhnika eksperimenta, no.3, 1962, 150-153

TEXT: Description of a simple apparatus giving more uniform and faster crushing of preparations than the ultrasonic method. Shock waves obtained as a result of an electric discharge in a shock waves obtained as a result of an electric discharge in a liquid are used to break up the sample. In general this type of discharge produces a damped oscillation with a frequency ~10<sup>5</sup> c/s. The apparatus consists of an ebonite container with two electrodes and a hermetically sealed lid. The power supply is from a half wave rectifier using a step up transformer with a number of voltage tappings to vary the output voltage. A condenser is voltage tappings to vary the output voltage. A condenser is charged through a resistance and then discharged between the electrodes in the working space. Uniformity of the crushed electrodes in the working space. Uniformity of the crushed electrodes in the working space. Uniformity of the crushed electrodes in the working space duration is of the order of the shape of the lid. The discharge duration is of the order of milliseconds and hence has an explosive character which disrupts

Apparatus for the fine crushing of ... \$/120/62/000/003/035/048

the material in the working chamber. By the use of an enclosed chamber the effect of the shock wave is enhanced and the electrode voltage can be reduced to ~1 - 2 kV (instead of 30 - 250 kV used in other systems). Typical microphotographs are given showing that carbon dust produced after 5 - 10 minutes in this apparatus is of the same order of size and more uniform than carbon dust produced by a ball mill in 60 minutes at the action of the shock waves increasing with increase in there are 7 figures.

SUBMITTED: November 11, 1961

Card 2/2

AUTHOR: Zhukov, A. G.I. Smirnov, V.I.

ORG: None

TITLE: Polarization properties of wire gratings in a longwave infrared region

SOURCE: Zhurnal prikladnov spektroskopii v 3, no. 5, 1965, 410-414

TOPIC TAGS: wire, wire product, IR grating, IR grating measurement, light

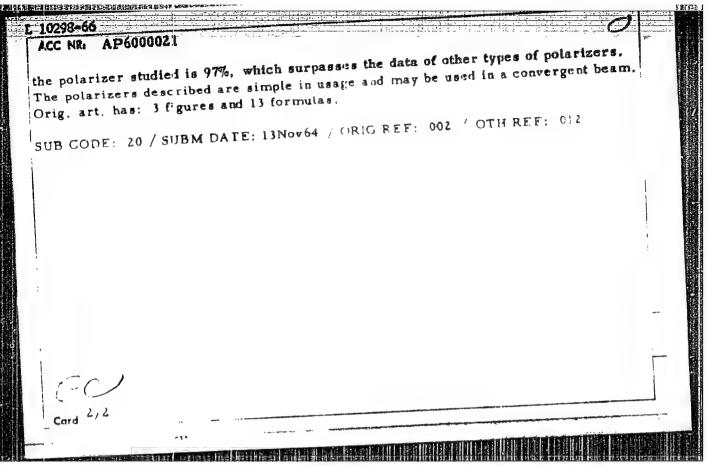
polarization, IR measurement AM

ABSTRACT: The authors investigate wire gratings with relationships b/t = 0.73 and 0.87 (where b is the width of the clearance between the wires, and t is the spacing) in the wavelength region of  $60-650\,\mu$ . The measurements were performed with a longwave IR spectrometer. The gratings consisted of square metal frames, one side of which was strung with tungsten wire coated with a gold layer 0.5  $\mu$  thick. On the basis of experimental fata obtained, the authors conclude that the polarizing capabilities of the wire grating studied is at least 95% in the  $300-650\,\mu$  wavelength. The employment of two gratings in one polarizer in the  $150-650\,\mu$  wavelength makes it possible to obtain almost complete polarization. The transmission coefficient of

Card 1/2

UDC: 535.5

2



· 1825年中华国际国际企业中华中国的国际企业中国的国际企业中国的国际企业中 . IJP(1:)" CG/WII. ··· ENT(1). SOURCE CODE: 10 AP6019370 ACC NRI AUTHOR: Zhukov, A.G.; Smirnov, V.I. TITLE: Polarizing properties of echellette gratings in the long-wave infrared region SOURCE: Zhurnal prikladnoy spektroskopii, v. 3, no. 6, 1965, 560-563 TOPIC TACS: light reflection, light polarization spectrometer ABSTRACT: Data are given on the polarizing properties, in the 62 to 650 micron band, of dispersion and filtering echelette gratings used in tre monochromator of a long-wave spectrometer (see A. G. Zhukov, Optika : Spektroskoplya, Vo. 17, p 284, 1964: English translation in Optics and Spestroscopy). Reflection of polerised light by the gratings was measured as a function of the orientation of an electric field to the grating steps. Two wire grids, having periods of 30 microns and spaced a few millimeters apart, served as a highly effective polarizer in the 62 to 650 micron band. Two cases are considered: 1) in which the electrical field vector is at right angles to the plane of incidence and parallel to the grating steps, and 2) in which the vector is parallel to the plane of incidence and at right angles to the steps. The ratios son son and all and all are the corder coefficients of reflection for the two cases and all are the first order coefficients, respectively) are used as the measures of grating reflectivity. Curves are plotted for the two cases showing the absolute values of the coefficients and the values of the ratios as dependent on the ratio of the wavelength to grating period. Also shown are curves of summed ratios a a a platted as functions of wavelength for three sets of gratings studied. Some of the results differ from those of other authors. Grig. art. has: 3 figures and 1 table. /JPRS/ SUBM DATE: 13Nov64/ ORIG REF: 003/ CTH REF: 005 SUBM CADE: 20/ SUBM DATE: 13Nov64/ ORIG REF: 003/ UNC. 535.5

FD-1187

USSR/Mathematics - Bibliography

Montemonica - prantage - 2

Author : Zhukov, A. I. (reviewer)

Pub. 118-28/30

Title : Review of the book Chislennyye metody matematicheskogo analizat,

Sh. Ye. Mikeladze [see preceding abstract]

Periodical: Usp. mat. nauk, 9, No 3(61), 276-277, Jul-Sep 1954

Abstract: In the reviewer's opinion the essential deficiency of the book is the absence of methods for numerically solving algebraic and transcendental equations and that the contents of the book do not correspond at all with its title. The book is devoted in the main to certain problems in the calculus of finite differences and in the theory of approximation, which are expounded in a very theoretical and abstract fashion. The author disregards the interests of the practical workers in applied fields, which is strange in view of the title of the book. The book is

very inconvenient for the study of numerical analysis; it is impossible to recommend it for practicing computers. The best part of the book is

its summary of formulas.

Institution :

Card 1/1

Submitted :

WESR/Engineering - Hydrodynamic equations

Card 1/1

Pub. 22 - 10/44

Authors : Zhukov, A. I.

Title

About one group (femily) of setting. At na. equitions

Periodical : Dok. AN SSSR 97/6, 985-886, Aug. 1, 1994

Abstract : Exact solution of the system of hydrodynumic e ustimus

$$\frac{\partial (\rho u)}{\partial x} + \frac{\partial (1)}{\partial r} + \frac{\partial \rho}{\partial r} = 0$$

$$\frac{\partial u}{\partial x} + \frac{\partial v}{\partial r} + \frac{\partial \rho}{\partial r} = 0$$
is given.
$$\frac{\partial (\rho u)}{\partial x} + \frac{\partial (1)}{\partial r} + \frac{\partial \rho}{\partial r} = 0$$
is given.

Institution :

Presented by : Academician M. V. Keldysh, June 3, 1954

ZHUKOV, A.I.

USSR / Acoustics. Sound Vibrations and Waves

J-2

Abs Jour

s Ref Zhur - Fizika, No 5, 1957, No 12670

Author

2 Zhukov, A.I., Kazhdan, Ya.M.

Inst

Hathematics Institute, Academy of Sciences, USSR, Moscow (Dept. Caplis meth.)

Title

: Motion of Gas Under the Influence of a Short-Duration Pulse.

Orig Pub

: Akust, zh., 1956, 2, No 4, 352-357

Abstract

2 A further refinement is made of the discussion concerning the integration of self-similar equations in the problem of shock in cold gas. Fesults of calculations are given concerning the motion of gas under the influence of a short-duration finite pulse, illustrating the character of the departure of the motion from the self-similar mode.

Card

1/1

# Convergence of a solution of a difference equation to a solution of a differential equation. Dokl. AN SSSR 117 no.2:174-176 N '57. (MIRA 11:3) 1. Otdeleniye prikladnoy matematiki Matematicheskogo instituta in. V.A. Steklova Akademii nauk SSSR. Predstavleno akademikom M.V. Keldyshem. (Difference equations) (Differential equations)

16(1) AUTHOR:

Zhukov, A.I.

SOV/42-14-3-7/22

TITLE:

Limit Theorem for Difference Operators

PERIODICAL:

Uspekhi matematicheskikh nauk, 1959, Vol 14, Nr 3, pp 129-136(USSR)

ABSTRACT:

Let the equation

(1)  $\frac{\partial u}{\partial t} = a_0 u + a_1 \frac{\partial u}{\partial x} + a_2 \frac{\partial^2 u}{\partial x^2} + \cdots + a_n \frac{\partial^n u}{\partial x^n}$ 

be considered with constant real coefficients on the whole real line. Let the linear operator F be defined by :

(2)  $u^{1}(x) = F u^{0}(x)$ ,

where it is  $u^0(x) = u(t_0, x)$  and  $u^1(x) = u(t_0 + \widetilde{c}, x)$ . Let the operator F be approximated by a difference operator G, so

that  $u^*(x) = Gu^0(x) = \sum_{m} b_m u^0(x + mh)$ , where m runs through a finite set of integer values. It is said that G has the index p, if for every polynomial f(x) of degree  $\leq (p-1)$  it

Card 1/3

Card 2/3

- Limit Theorem for Difference Operators

SOV/42-14-3-7/22

$$f_p(x) = \frac{1}{2n} \int_{-\infty}^{\infty} e^{-ixy} e^{\frac{\pm (iy)^p}{p!}} dy$$
 and  $*$  is the con

volution sign.

There are 3 figures, and 3 references, 1 of which is Soviet, and 2 American.

SUBMITTED: January 11, 1957

Card 3/3

ZHUKOV, A. I., SEMENDYEV, K. A., GODUNOV, S. K. (Moscow)

"Numerical Methods in the Analysis of One-Dimensional Unsteady Problems of Gas Dynamics."

report presented at the First All-Union Congress on Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb 1960.

# "APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002064920006-2

KAZANTSEV, Ye.I.; ZHUKOV, A.I.; KOGADEYEV, A.A.; SHKLYAR, M.S.;
GELLER, G.Ya.

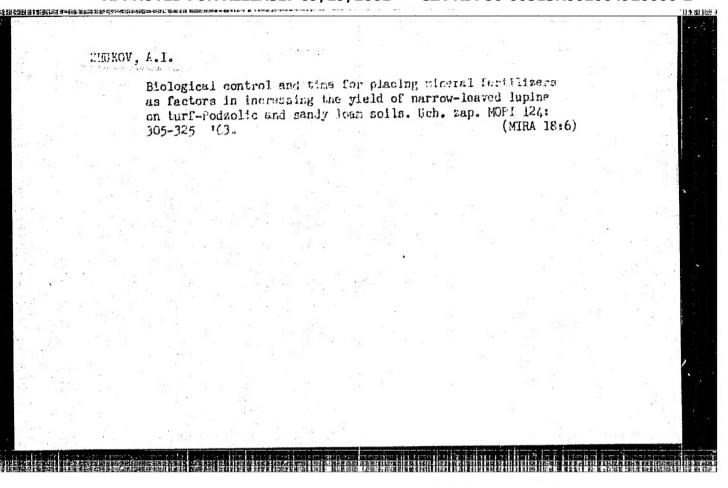
Operating regenerative soaking pits heated by cold gas.
Stal' 25 no.3:274-276 Mr '65.

1. Donetskiy politekhnicheskiy institut I Makeyevskiy metallurgicheskiy zavod.

TOVPENETS, Ye.S., kand. tekhn. nauk; IVASHCHENKO, V.K., inzh.; STYCHINSKIY,
L.P., inzh.; ZHUKOV, A.I., inzh.; MERSHCHIY, N.P., inzh.; KORENEV,
K.I., inzh.; SHUMETKO, H.I., inzh.; IVANOV, F.I., inzh.

Mechanical properties of reinforcement rods after heat treatment
from the rolling process temperature. Stal' 25 no.2:157-160
(MIRA 18:3)

1. Donetskiy politekhnicheskiy institut; Makeyevskiy metallurgicheskiy zavod; Nauchno-issledovatel'skiy institut "Donpromstroy"
i Novo-Kramatorskiy zavod tyazhelogo mashinostroyeniya.



ZHUKOV, A.I.; KAZANTSEV, Ye.I.; VAKULENKO, V.A.

Separation of thorium and uranium (VI) on KU-1 remin. Zhur.
prikl. khim. 38 no.1:43-47 Ja '65. (MRA 18:3)

1. Ural'skiy politokhnicheskiy institut imeni Kirova.